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UNITED STATES DISTRICT COURT DISTRICT OF OREGON

AUDUBON SOCIETY OF PORTLAND, WILDLIFE CENTER OF THE NORTH COAST, ANIMAL LEGAL DEFENSE FUND, CENTER FOR BIOLOGICAL DIVERSITY, FRIENDS OF ANIMALS,

IN

V.

U.S. ARMY CORPS OF ENGINEERS, U.S. FISH AND WILDLIFE SERVICE, USDA WILDLIFE SERVICES,

Defendants.

Plaintiffs,

Civil No. 15-665

MOTION FOR PRELIMINARY INJUNCTION

For the reasons set forth in the accompanying memorandum, Pursuant to FRCP 65 Plaintiffs respectfully ask that this Court enter a preliminary injunction enjoining federal defendants or their agents from taking action to kill cormorants or destroy cormorant nests in accord with defendant U.S. Army Corps of Engineers' management plan for cormorants on East Sand Island in the Columbia River estuary near Astoria, Oregon.

DATED: April 29, 2015

Respectfully Submitted,

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MEMORANDUM IN SUPPORT OF PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION

I. INTRODUCTION

Within days, Federal defendants will begin shooting 3,489 adult double-crested cormorants on and around East Sand Island in the Columbia River estuary, as well as start to destroy the eggs in 5,879 cormorant nests. Up to an additional 3,489 cormorant nests will also be lost as the shooting death of parent birds causes eggs in existing nests to become unviable and consigns newly hatched chicks to death by starvation or predation. Scores of non-target Brandt's cormorants and pelagic cormorants will likely also be killed because they are difficult to distinguish from the more common double-crested cormorants. The barbarity of these actions is matched only by their likely futility. Federal agencies propose this widespread killing of native birds in order to increase runs of salmon and steelhead listed as threatened and endangered. But as Plaintiffs discuss below, information available to or developed by federal defendants raises serious questions about whether killing cormorants will in fact protect listed fish. Somewhat incredibly, federal defendants assert that they have not considered – and are not required to consider – whether killing thousands of native birds will have any effect on the number of listed salmon and steelhead that return to their spawning grounds.

Cormorants and salmon have of course coexisted in the Columbia River Basin for millennia; the proposed human intervention now at issue stems from federal agencies' efforts to reverse the decline of salmon and steelhead caused to a significant degree by massive changes in the Basin's aquatic ecosystem due to construction and operation of federal dams. However, despite many requests to do so from a wide variety of interests, including Plaintiffs in this case, federal dam managers have not considered modifying dam operations in order to achieve the salmon survival benefits that federal agencies contend will occur as a result of killing cormorants.

Plaintiffs (hereinafter collectively referred to as "Portland Audubon") respectfully request that this Court grant their motion for a preliminary injunction for the reasons set forth below. Like many citizens, governments, tribes, and organizations throughout the Northwest, Portland Audubon supports decisive actions to restore salmon and steelhead in the Columbia Basin to harvestable levels. However, federal agencies' current plans to kill thousands of native birds are at odds with a host of federal laws and will do little to improve salmon survival.

II. **BACKGROUND**

The Columbia River estuary is home to three species of cormorants: Brandt's, doublecrested, and pelagic cormorants (in this brief, "cormorant" will refer specifically to the doublecrested cormorants; other species will be identified by their individual species names). Cormorants are large, prehistoric-looking diving birds with matte-black plumage. While cormorants eat a wide variety of fish, crabs, shrimp, crayfish, frogs, and salamanders—and sometimes even snakes, mollusks, and plant material—humans have often come into conflict with cormorants due to the birds' consumption of fish.

While often perceived as common and numerous, cormorants in the western United States have actually fallen to less than 10% of their historic level. However, due to dumping of dredge spoils by the U.S. Army Corps of Engineers ("Corps") that enlarged East Sand Island in the Columbia River estuary near Astoria, the island now provides ideal habitat for cormorants. The cormorant population on the island has grown in recent years, peaking at around 14,000 pairs in 2013; much of the recent increase in the island's population has likely resulted from immigration of cormorants that formerly nested elsewhere in the West as colony declines were documented over much of Southern Alaska, British Columbia, Washington and Southern California. Corps' Final Environmental Impact Statement on Double-Crested Cormorant MEMORANDUM IN SUPPORT OF PLAINTIFFS MOTION FOR PRELIMINARY INJUNCTION

Management Plan (hereinafter "FEIS") at 3-18.¹ Two other species of cormorants, Brandt's and pelagic cormorants, also use East Sand Island and the surrounding area, though in far lower numbers than double-crested cormorants.

The Corps' assertion that Cormorant populations outside of East Sand island are relatively static simply is not supported by the facts. Of the eight major regions described in the FEIS only coastal Oregon has been experiencing modest increases in Cormorants and the Oregon Department of Fish and Wildlife (ODFW) has announced its intention to haze cormorants at six coastal estuaries. Two regions, British Columbia and Northern Coastal California are experiencing significant declines. The four remaining regions lack adequate data to establish a reliable trend. FEIS at 3-20 to 3-28. Cormorant colony declines in the western U.S. were documented at the same time the East Sand Island cormorant colony was experiencing growth. For example, cormorants on Mullet Island in the Salton Sea in California, which in 2009 had about 6,000 breeding pairs, have not successfully bred in three years and scientists anticipate a complete loss of this colony site. *See* Declaration of Daniel J. Rohlf (hereinafter "Rohlf Dec."), Ex. A. Today, East Sand Island is the only colony currently adding significantly to the western population of cormorants; it alone accounts for 40% of the total western population. FEIS at Executive Summary-2.

Cormorants are opportunistic and generalist feeders, meaning they prey on many aquatic species but tend to concentrate on those easiest to catch. On East Sand Island, cormorants' most prevalent prey type is the northern anchovy, followed by various other marine and freshwater

¹ Since the EIS is voluminous even in electronic form, Plaintiffs respectfully direct the Court to the Corps' website for this EIS,

http://www.nwp.usace.army.mil/Portals/24/docs/environment/EIS/Cormorants/Final_EIS_Cormorant Feb2015.pdf.

fishes including juvenile salmon and steelhead. FEIS at 3-16. The birds' focus on prey that is easiest to catch means that cormorants often eat injured or sick fish are likely to die anyway as a result of being eaten by another predator or otherwise succumbing to injury or disease before returning to spawn as adult fish; this is called "compensatory mortality." See section 4(A)(1), infra. Studies also indicate that cormorants disproportionately eat hatchery fish, which are often less able to evade predators than wild fish. Finally, research indicates that the size of the cormorant colony on East Sand Island does not always correspond with the number of juvenile salmon and steelhead eaten by these birds. *Id.* Together, these factors mean that reducing cormorant numbers does not necessarily correlate with increased survival of listed salmon and steelhead that return to their native rivers and streams to spawn.

Nonetheless, cormorants' inclusion of salmon and steelhead as part of their diet has brought these birds to the attention of federal dam managers. The Corps, together with the Bureau of Reclamation ("BoR") and Bonneville Power Administration ("Bonneville"), operate the federal hydropower dams in the Columbia River Basin, collectively known as the Federal Columbia River Power System ("FCRPS" or "hydrosystem"). Due in significant part to the existence and operations of the FCRPS, thirteen Evolutionarily Significant Units ("ESUs") of salmon and steelhead in the Columbia Basin are listed as endangered and threatened under the federal Endangered Species Act ("ESA"). In 2007, the Corps, BoR, and Bonneville jointly released a Biological Assessment pursuant to their obligations under the ESA. In that document, the agencies determined that "the existence and operation of the FCRPS alone without mitigation is likely to result in a jeopardy finding" for the listed salmon and steelhead ESUs, a result that would violate Section 7(a)(2) of the ESA. 16 U.S.C. § 1536(a)(2). See Rohlf Dec. Ex. B.

To avoid this "jeopardy" outcome, the Corps and other agencies themselves proposed a

comprehensive set of "reasonable and prudent alternatives" ("RPAs"), including both dam operations and a variety of other actions, that these agencies believed would allow them to operate the FCRPS, in conjunction with funding and carrying out other actions to improve salmon survival, in a manner that does not violate the ESA.² The action agencies' proposed RPA called for reduction in double-crested cormorants' consumption of juvenile salmon and steelhead in the Columbia River estuary by an amount to be determined later. NMFS eventually adopted these proposed RPA measures—including the agency's proposed hydrosystem operations and provision calling for reduced cormorant predation—as elements of the RPA set forth by NMFS in its 2008, 2010, and 2014 biological opinions ("BiOp") under the ESA. In an appendix to its 2014 BiOp, NMFS calculated that the increase in cormorants in the Columbia estuary since 2002 has created a "survival gap" to be 3.6% for upriver steelhead and 1.1% for upriver Chinook. 2014 FRCPS BiOp (Rohlf Dec. Ex. C) at Appendix E-5 (hereinafter "2014 BiOp). NMFS admitted that this survival gap "can be addressed with any actions that improve [salmon and steelhead] productivity," but the agency nonetheless asserted "it is logical that cormorant management objectives assist in this goal." 2014 BiOp, App. E, at E-3. NMFS' 2014 BiOp thus includes RPA measure 46, which calls for reducing the East Sand Island cormorant population to between 5,380-5,939 nesting pairs. 2014 BiOp at 410. NMFS' BiOp did not attempt to evaluate whether decreasing the cormorant population to this level would actually result in the necessary

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² The agencies recognized that the National Marine Fisheries Service ("NMFS"), the expert agency charged with implementing the ESA for marine species, usually specifies an RPA in a biological opinion resulting from Section 7 consultation under the ESA. However, drafting the RPA allowed the action agencies to formulate a package of measures designed to maintain more or less status quo hydrosystem operations while pointing to alleged increases in salmon survival from measures such as tributary habitat restoration projects and managing avian predators.

³ Whether killing cormorants on East Sand Island will close this "survival gap" is far from clear.

³ Whether killing cormorants on East Sand Island will close this "survival gap" is far from clear *See* Section IV.A.1., *infra*.

increases in productivity of returning adults, and the agency did not account for compensatory mortality or other factors influencing whether cormorant predation affects returning salmon and steelhead numbers in linking reduction in the East Sand Island cormorant colony to closing the "survival gap" in returning adult spawners. See id.

After NMFS completed its most recent BiOp for FCRPS operations, the Corps issued a record of decision in February 2014 adopting FCRPS operations and other actions consistent with the 2014 BiOp's RPA; this RPA will govern hydrosystem operations and related actions through 2018. Rohlf Dec. Ex. D. Neither the Corps nor NMFS prepared an Environmental Impact Statement ("EIS") in accord with the National Environmental Policy Act, 42 U.S.C. §§ 4321 et seq. ("NEPA") to analyze the environmental consequences of these actions and examine alternatives to the FCRPS operations and other actions set forth in the RPA.

The Corps subsequently prepared an EIS relating specifically to cormorant management, describing the "purpose and need of the action subject to consideration" as bringing cormorant predation to the level identified in NMFS' 2014 BiOp RPA measure 46. The Corps rejected comments from many interested parties calling on the agency to assess ways to improve survival of juvenile salmon and steelhead without killing cormorants, such as by modifying operations of the federal dams. The Corps responded that it was obligated to implement measures in the RPA and thus would analyze only alternatives consistent with reducing the cormorant population on East Sand Island to the level set forth in the RPA. The Corps also did not analyze whether reducing cormorant predation to the base period level would actually result in an increase in productivity of listed adult salmon and steelhead sufficient to increase productivity of listed adult salmon by the amount identified by NMFS in the 2014 BiOp. Finally, though the Corps acknowledged evidence of compensatory mortality and evidence that cormorants 6 disproportionately prey on hatchery rather than wild fish, the Corps dismissed these factors as irrelevant to its decision-making. *See* FEIS at 136-139.

After the Corps completed its the "Double-crested Cormorant Management Plan to Reduce Predation of Juvenile Salmonids in the Columbia River Estuary" and accompanying EIS in March, 2015, the agency secured a depredation permit to kill double-crested cormorants in April, 2015—which includes authorization to accidentally kill a specific number of Brandt's and pelagic cormorants—from the U.S. Fish and Wildlife Service ("FWS") pursuant to the Migratory Bird Treaty Act ("MBTA"). *See* Rohlf Dec. Ex. E. Like the Corps and NMFS, FWS focused only on reducing the number of cormorants as a means of reducing predation of juvenile salmonids; the agency also did not consider compensatory mortality or take into account any other information relevant to whether killing thousands of cormorants would actually lead to increases in productivity of spawning adults from listed ESUs. The Corps contracted with USDA Wildlife Services, an agency within the U.S. Department of Agriculture that kills millions of predators each year, to carry out the actual killing of cormorants.

III. STANDARD OF REVIEW

A preliminary injunction requires that a plaintiff "establish that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, and that an injunction is in the public interest." Winter v. Natural Res. Def. Council, 555 U.S. 7, 20 (2008); see also Alliance for the Wild Rockies v. Cottrell, 632 F.3d 1127, 1134–35 (9th Cir. 2011) ("Cottrell") (applying the preliminary injunction standard articulated in Winter v. NRDC). A preliminary injunction is not a preliminary adjudication on the merits—it is "a device for preserving the status quo and preventing

irreparable loss of rights before judgment." Textile Unlimited, Inc. v. A.BMH & Co., Inc., 240 F.3d 781, 786 (9th Cir. 2001).

While adhering to the four-factor test articulated in *Winter*, the Ninth Circuit has made it clear that courts in the circuit may apply a sliding scale analysis for injunctive relief. "Under this [sliding scale] approach, the elements of the preliminary injunction test are balanced, so that a stronger showing of one element may offset a weaker showing of another." Cottrell, 632 F.3d at 1131. The Ninth Circuit noted that it joined the Seventh and the Second Circuits "in concluding that the 'serious questions' version of the sliding scale test for preliminary injunctions remains viable after the Supreme Court's decision in Winter. In this circuit, the test has been formulated as follows: "A preliminary injunction is appropriate when a plaintiff demonstrates . . . that serious questions going to the merits were raised and the balance of hardships tips sharply in the plaintiff's favor." Id. at 1134–35.

The Administrative Procedure Act ("APA") requires a court to "hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). An agency action is arbitrary and capricious if "the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Motor Vehicle* Mfrs. Ass'n of U.S. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983).

Courts review federal agencies' compliance with NEPA and the MBTA under the APA's "arbitrary and capricious" standard of review. Marsh v. Or. Natural Res. Council, 490 U.S. 360, 375 (1989); Hill v. Norton, 275 F.3d 98, 103 (9th Cir. 2001). Under NEPA, a court is tasked with MEMORANDUM IN SUPPORT OF PLAINTIFFS MOTION FOR PRELIMINARY INJUNCTION

"ensur[ing] that the agency has taken a 'hard look' at the potential environmental consequences of the proposed action." *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 993 (9th Cir. 2004) (citation omitted). Additionally, courts review an agency's decisions to assess whether the agency "considered the relevant factors and articulated a rational connection between the facts found and the choice made." *Pac. Coast Fed'n of Fishermen's Ass'ns v.*NMFS, 265 F.3d 1028, 1034 (9th Cir. 2001) (citations omitted).

This Court should review *de novo* Portland Audubon's claim under the Water Resources Development Act ("WRDA"), Pub. L. No. 106-53, 113 Stat. 376 (1999) (codified at 16 U.S.C. § 3301 note). The WRDA requires the Corps to follow statutorily prescribed procedures (*i.e.*, manage avian predators on East Sand Island consistent with a management plan developed by FWS); therefore, the question of whether the Corps followed this prescribed procedure raises a legal issue of statutory construction, and *de novo* review is appropriate. *See I.N.S. v. Cardoza-Fonseca*, 480 U.S. 421, 446 (1987). This *de novo* review is "limited to ensuring that statutorily prescribed procedures have been followed." *Kern Cnty. Farm Bureau v. Allen*, 450 F.3d 1072, 1076 (9th Cir. 2006) (internal citations omitted).

IV. ARGUMENT

A. THE PLAINTIFFS ARE LIKELY TO SUCCEED ON THE MERITS

1. The agencies have failed to demonstrate a rational connection between killing thousands of birds and increasing returns of listed salmon spawners.

While at this stage of the proceedings Portland Audubon does not have the benefit of a complete administrative record, no information or analysis available to date from any federal agency provides a rational connection between the killing of thousands of cormorants and

destruction of thousands of nests (and issuance of permits authorizing such activities) and increases in productivity of adult spawners from listed salmon and steelhead ESUs sufficient to fill the "survival gap" identified by NMFS in its 2014 FCRPS BiOp. In fact, in the hundreds of pages of agency documents purporting to justify the Corps' program to kill cormorants on East Sand Island, there has been almost no analysis of whether reducing cormorant predation of juvenile fish is likely to actually increase the number of adult spawners from ESUs listed as threatened and endangered.

FWS highlights federal defendants' refusal to consider this question in its definition of the administrative record in this case. As noted in the accompanying declaration of Daniel J. Rohlf, counsel for Portland Audubon requested that federal defendants supply Plaintiffs with any analyses conducted by FWS relevant to determining whether killing cormorants on East Sand Island consistent with the Corps' management plan will improve adult returns of listed salmon and steelhead; Plaintiffs assumed that such analyses would be a part of FWS' administrative record in this case and Portland Audubon wished to review them prior to filing its request for a preliminary injunction. Counsel for federal defendants responded that FWS would not provide this information because the agency considers it to be beyond the scope of the administrative record in this case:

"[T]he depredation permit issued by FWS examined the effectiveness of the proposed action in addressing the depredation issue described in the permit application--cormorant predation on *juvenile* salmonids. The FWS' analysis was not required to and did not consider the more remote effects of the proposed action on eventual adult returns. As I'm sure you are aware, that issue was addressed in the FCRPS Biological Opinion. Our position, therefore is that the FWS' administrative record in this case does not include information going beyond the effectiveness of the proposed action on controlling cormorant predation on juvenile salmonids."

Rohlf Dec. at ¶ 2 (emphasis in original). According to federal defendants, therefore, FWS (and apparently the Corps as well) not only contends that it was justified in not considering whether killing thousands of birds is likely to lead to increased returns of listed adult salmon and steelhead, the agencies believe this question is not even relevant to the their decision whether to go forward with this killing program. Further, to the extent that the Corps or FWS have developed information or analyses relevant to whether killing cormorants will increase adult fish runs, federal defendants take the position that neither Portland Audubon nor this court may even review this information in the context of the instant litigation.

This stance makes little sense. In the 2014 BiOp's RPA measure 46, NMFS identified a need to increase productivity of listed adult upriver steelhead spawners by 3.6% and productivity of interior Columbia Basin Chinook spawners by 1.1%, figures that NMFS labeled as a "survival gap" that needs to be closed to avoid jeopardy to listed salmon and steelhead; the agency called on the Corps to reduce cormorants on East Sand Island to the lower population level identified in the RPA to increase salmon survival and thus fill these "gaps." Therefore, the 2014 BiOp's RPA itself – which the Corps cites as the purpose and need for its cormorant management plan – makes the link between killing cormorants and increasing productivity of returning adult salmon and steelhead from listed ESUs the central issue in this case. However, as summarized below, many issues influence whether, and to what extent, reducing the East Sand Island cormorant colony will actually increase the number of returning adults from listed salmon and steelhead ESUs.

The Corps' cormorant management plan relies on the notion that reduce the size of the East Sand Island cormorant colony will correspondingly reduce cormorant predation on juvenile salmon and steelhead. However, Studies also show that juvenile salmon and steelhead 11 consumption rate by cormorants nesting on East Sand Island has varied widely independent of the size of the cormorant population. A 2014 study by a long-time Corps contractor explained that "[c]ormorant colony size has been relatively stable since 2006; changes in colony size have not explained recent variability in cormorant smolt consumption." Rohlf Dec., Ex. F. The study goes on to explain that its results "indicate that [despite the population of the ESI cormorant colony peaking at an all-time high in 2013], impacts on salmonid survival were lower in 2013 compared to 2012 " *Id.* at 67. Thus, the study explains, cormorant "colony size [on ESI] was not a good predictor of impacts on salmonids in 2013." *Id.* The Corps' cormorant EIS also acknowledges "the large inter-annual variation in predation impacts," which the agency finds is influenced by environmental conditions that "affect the timing, abundance, and availability of forage fish in the estuary (e.g., river discharge, tidal volume, sea surface temperature, upwelling timing and strength), differences in [cormorant] abundance, nesting chronology, and nesting success, and large-scale climatic factors that influence both the prey and predator " FEIS Executive Summary at 8. Another study included as an appendix to the cormorant EIS concluded that "[e]nvironmental factors were as or more important in explaining the variability in cormorant predation than colony size." FEIS at Appendix C-19.

Many commenters on the Corps' cormorant EIS, including Portland Audubon, also raised questions about the draft EIS's failure to account for compensatory mortality, i.e. the concept that juvenile salmon and steelhead eaten by cormorants would have died anyway as a result of being eaten by another predator or otherwise succumbing to injury or disease before returning to spawn as adult fish. In response, the Corps acknowledged that the cormorant EIS's analysis of

cormorant predation on juvenile salmon did not account for compensatory mortality. *See FEIS at 4-138 to 4-139. The agency also admitted that evidence of compensatory mortality exists in Columbia Basin juvenile salmon and steelhead, including the conclusion of a 2012 NMFS study finding juvenile salmon and steelhead "that experienced lower avian predation rates in the estuary returned as adults at higher rates only some of the time." FEIS at 4-137. Such studies raise questions as to whether reducing cormorant predation of listed juveniles will have any effect on closing the "survival gap" in adult productivity identified by NMFS.

Still other variables affect whether reducing cormorant populations on East Sand Island will increase productivity of listed salmon to the extent calculated by NMFS in its 2014 FCRPS BiOp. Research indicates that cormorants in the Columbia estuary prey disproportionately on hatchery fish, which of course do not contribute to productivity of listed salmon and steelhead spawners. *See* Rohlf Dec. Ex. at 1595-1596. Additionally, cormorants also prey on northern pikeminnows, a species of native fish that also eat juvenile salmon. In its 2010 BiOp, NMFS noted research suggesting that "removal of avian predators could result in increased predation [on juvenile salmonids] by pikeminnows." Rohlf Dec. Ex. H at 95. Cormorants also eat large numbers of juvenile American shad, non-native fish that have become prominent in the Columbia Basin – and which according to NMFS' 2010 FCRPS BiOp significantly alter food webs, compete directly and indirectly with juvenile salmon for resources, and thus "pose a threat to the recovery of ESA-listed Pacific salmon." Id. at 93—94.

The Corps, however, considered none of these variables in deciding to kill thousands of cormorants and destroy thousands of nests on East Sand Island. The cormorant EIS's sole

⁴ The Corps also noted that NMFS likewise did not consider compensatory mortality in drafting the element of its 2014 FCRPS BiOp RPA calling for reduction in cormorants on East Sand Island. *See* FEIS at 4-138.

discussion of benefits to adult salmon comes in the document's economic analysis of benefits to fishing economies as a result of killing cormorants. For that analysis, the Corps developed a method to link reduction in cormorant predation to adult salmon and steelhead returns for specific fisheries. *See* FEIS at 4-65 to 4-66. There, however, Corps acknowledged that its calculation presented only the *maximum* potential economic benefits of increased fishing due to increases in adult returns because its model did not account for compensatory mortality. FEIS at 4-56. In contrast to its indifference to this factor in assessing whether killing cormorants is likely to increase returning spawners of listed salmon and steelhead, the agency noted that actual economic benefits of killing cormorants, i.e. the extent to which such management would result in more adult fish that are available to catch, "would ultimately depend on the degree of compensation actually observed." FEIS at 4-67. In other words, the higher the level of compensatory mortality, the less benefit in terms of returning adult salmon will result from killing cormorants.

Like the Corps, FWS ignored the issue of whether killing cormorants is likely to actually result in the increases in productivity of listed adult salmon called for in NMFS' 2014 FCRPS BiOp in its process of deciding whether to issue depredation permits to the Corps under the MBTA. FWS' record of decision authorizing issuance of a depredation permit pursuant to 50 C.F.R. § 21.41 focuses exclusively on cormorant predation on listed juvenile salmon with no effort to assess whether, or the extent to which, reduction in cormorant predation on these juvenile fish will in fact lead to the increases in adult productivity called for in NMFS' BiOp. *See* Rohlf Dec. Ex. E at 17. FWS' decision document does not mention or discuss compensatory mortality or any of the other factors mentioned above that affect whether reducing the number of cormorants is likely to actually increase the number of returning adult salmon.

For listed salmon and steelhead in the Columbia Basin, the key considerations relating to whether or not these ESUs face jeopardy focus on the number of adult spawners returning to their native rivers and streams. For example, in its 2014 FCRPA BiOp, NMFS noted that its "viable salmon population" metrics include adequate abundance, productivity (or population growth rate), population spatial structure, and biological diversity; the agency also emphasized in the 2014 BiOp that the agency's 2008 FCRPS BiOp focused on abundance trends and productivity. 2014 BiOp at 48. All of these metrics relate to adult spawners, not juvenile migrants. NMFS also identified specific targets for increases in survival of listed adult interior basin steelhead and Chinook that the agency sought from the 2014 BiOp RPA element calling for cormorant management. *Id.* at 409. However, in their decisions to authorize killing thousands of native birds and destroying thousands of nests, the Corps and FWS ignoring several important factors that influence whether reducing the East Sand Island cormorant colony will actually result in such increases in listed adult salmon. This failure to draw a rational connection between the Corps' management plan and benefits to listed salmon and steelhead is arbitrary and capricious.

2. The Corps Violated NEPA.

NEPA requires federal agencies to prepare an EIS for "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332. The statute mandates that an agency "shall to the fullest extent possible" use the environmental impact assessment process "to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the environment." 40 C.F.R. § 1500.2(e). Reasonable alternatives include those that substantially meet the agency's purpose and need.

Additionally, the ESA requires federal agencies to ensure "that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat " 16 U.S.C. §1536(a)(2). To facilitate compliance with these prohibitions, section 7 requires federal agencies to consult with FWS or NMFS; then, the expert agency generates a biological opinion providing advice as to whether a proposed action may cause jeopardy or destroy or adversely modify critical habitat. If FWS or NMFS finds that a proposed action is likely to violate section 7(a)(2), the Service will suggest an RPA to the proposed agency action that would comply with the ESA. *See* 50 C.F.R. § 402.14; 402.02 (definition of "reasonable and prudent alternative").

The Corps received over 159,000 comments on the EIS for its cormorant management plan, many of which asked the agency to evaluate alternative means of improving juvenile salmon survival other than killing or hazing cormorants. Similarly, in its evaluation of the Corps' draft EIS, the U.S. Environmental Protection Agency gave the document a rating that included "Environmental Concerns," meaning that the proposed action included impacts that should be avoided to fully protect the environment. FEIS at App. J (comments of EPA). EPA also rated the adequacy of the EIS as "Category 2 – Insufficient Information," defined to include a finding that EPA has identified "new reasonably available alternatives" that could reduce the environmental impacts of the action. *See id.* EPA noted that the Corps has discretion under section 7 of the ESA as to whether to implement all elements of an RPA, and recommended that the Corps "fully investigate non-lethal alternatives and the other means available to the Corps to support recovery of listed fish populations." *Id.*

In response to the many concerns about the range of alternatives considered in its cormorant EIS, the Corps asserted that "[t]he purpose and need [of the cormorant EIS] was specific to implementing RPA action 46 in the Federal Columbia River Power System Biological Opinion. . . . Accordingly, the range of reasonable alternatives includes those alternatives that might meet RPA action 46." FEIS at App. J-27. The Corps also defended the EIS's narrow range of alternatives by declaring that means of improving juvenile salmon survival other than reducing cormorant predation "would not achieve the specific objective of RPA action 46 . . . and these other courses of action are more relevantly addressed in other RPA actions, such as those specific to dam operations, habitat, harvest, and hatcheries." FEIS at App. J-27, 4.

With this reasoning, the Corps completed a perfect circle of logic that has allowed the agency to avoid evaluating alternatives to the dam operations strategy that it initially proposed to NMFS in its joint 2007 Biological Assessment with BoR and the Bonneville Power Administration. The Corps did not prepare an EIS analyzing alternatives to its proposed dam operations when it issued the Biological Assessment, or when the agency signed records of decision adopting similar versions of its FCRPS operation strategy in 2008, 2010, and 2014. In response to claims by the plaintiffs in Nat'l Wildlife Fed'n v. NMFS, No. 3:01-cv-00640-SI (D. Or. (currently briefing summary judgment before Judge Simon) that this lack of analysis violated NEPA, the Corps argues that it can comply with NEPA obligations in the context of implementing specific elements of the RPA set forth in NMFS' 2014 FCRPS BiOp. See Federal Defendants' Cross Motion for Summary Judgment and Memorandum in Support of Cross Motion and Opposition to Plaintiffs' Motions for Summary Judgment at 67–68, Nat'l Wildlife Fed'n v. NMFS, No. 3:01-cv-00640-SI (D. Or. Mar. 6, 2015). Now, however, the Corps takes the position that NEPA does not require the agency to analyze improvements to dam operations as a 17 MEMORANDUM IN SUPPORT OF PLAINTIFFS MOTION FOR PRELIMINARY INJUNCTION

means to improve salmon survival without killing cormorants because the Corps is implementing an element of the RPA—which effectively ties the agency's hands to looking only at controlling cormorant predation to make up the "survival gap" identified by NMFS. In other words, the Corps can defer the need to evaluate changes to dam operations under NEPA to the RPA implementation stage, but the Corps need not consider alternative dam operations at the implementation stage because such changes would not be consistent with the RPA.

Though the Corps has refused to consider modifying dam operations to make up the "survival gap" in juvenile salmon survival that allegedly results from the increase in the East Sand Island cormorant population, federal agency documents clearly indicate that such changes could have a greater salmon benefits than killing cormorants. For example, the "Estuary Module," an element of the recovery plans for listed salmon and steelhead ESUs, lists alteration of river flow into the Columbia River estuary as a threat to salmon and steelhead greater than avian predation. Estuary Module at 3-25 tbl. 3-2. The restoration plan prepared for the Columbia estuary as part of EPA's National Estuary Program also calls for improved flows into the estuary. See Rohlf Dec. Ex. I at 13. In addition, the State of Oregon has consistently proposed other dam operating strategies, such as increasing spill and decreasing reservoir levels during juvenile salmon migration, to improve survival of listed ESUs. However, FCRPS operations consistent with the RPA actually decrease flow and spill at times that would benefit salmon, and the Corps has consistently refused to consider analyze alternative operating strategies under NEPA.

While agencies must of course avoid violating jeopardizing threatened and endangered species pursuant to Section 7(a)(2) of the ESA, they "ha[ve] some discretion to deviate from the BiOp and its RPAs." San Luis & Delta-Mendota Water Auth. v. Jewell, 747 F.3d 581, 642–43 (9th Cir. 2014) ("Jewell"). Therefore, section 7 consultation under the ESA does not substitute

for an action agency's NEPA obligations. The Ninth Circuit emphasized in Jewell that BoR's decision to adopt an RPA in a BiOp for operation of a major federal dam and water management system in California required preparation of an EIS even though the agency was acting pursuant to at NMFS BiOp the set forth in an RPA specific operational measures designed to avoid jeopardy to ESA listed fish. 747 F.3d at 646-55.

Decisions interpreting NEPA also emphasize that an agency's failure to examine a reasonable and available alternative is fatal to the sufficiency of an EIS. See Idaho Conservation League v. Mumma, 956 F.2d 1508, 1519 (9th Cir. 1992). An EIS need not analyze every possible alternative, but "[t]he existence of a viable but unexamined alternative renders an environmental impact statement inadequate." Citizens for a Better Henderson v. Hodel, 768 F.2d 1051, 1057 (9th Cir. 1985) (citing *Brooks v. Coleman*, 518 F.2d 17, 18 (9th Cir. 1975)). Additionally, the agency must explain its rationale for eliminating an alternative. N. Alaska Envtl. Ctr. v. Kempthorne, 457 F.3d 969, 978 (9th Cir. 2006). The agency must present sufficient alternatives in its NEPA analysis to "permit a reasoned choice of alternatives so far as environmental aspects are concerned." Natural Res. Def. Council, Inc. v. Morton, 458 F.2d 827, 836 (D.C. Cir. 1972). An alternative may not be disregarded simply because it fails to solve the entire problem addressed in the agency's need for action. Id. Overall, NEPA regulations and case law emphasize that identifying and analyzing alternatives is "the heart of" the NEPA process. 40 C.F.R. § 1502.14; Ctr. for Biological Diversity v. U.S. Dep't of Interior, 623 F.3d 633, 642 (9th Cir. 2010).

Together, the holding in *Jewell* and the importance placed on analyzing an adequate range of alternatives by other courts and the law itself make crystal clear that NEPA requires the Corps to evaluate and consider alternatives to close the alleged "survival gap" in salmon survival MEMORANDUM IN SUPPORT OF PLAINTIFFS MOTION FOR PRELIMINARY INJUNCTION

that do not involve killing or otherwise disturbing thousands of native birds in the Columbia River estuary—including changes to dam operations.⁵ The Corps could have done this analysis in its cormorant EIS, or the Corps could have examined such alternatives in an EIS accompanying its 2014 record of decision adopting hydrosystem operations and related measures consistent with the RPA in NMFS' 2014 FCRPS BiOp.⁶ What the Corps may not do, however, is simply refuse to identify, evaluate, and consider alternative dam operations in *any* NEPA document—as the agency now seeks to do.⁷

In sum, the Corps should have analyzed a range of alternatives for closing the alleged "survival gap" caused by increases in cormorants on East Sand Island, including modifications to the operation and configuration of dams that account for the overwhelming percentage of

⁵ As also explained above, NMFS noted that the salmon "survival gap" it had identified as a result of the increased cormorant population on East Sand Island "can be addressed with any actions that improve [salmon and steelhead] productivity...." 2014 BiOp, App. E, at E-3. NMFS included as part of the RPA in its 2014 FCRPS BiOp a measure calling for returning cormorant predation to the "base level" believed to have occurred between 1883 and 2002 because NMFS found this approach to be "logical," not because it saw such action was the only means of increasing juvenile salmon survival. *Id*.

⁶ If the Corps examined alternative dam operation strategies in an EIS accompanying its 2014 record of decision adopting the RPA—as the holding in *Jewell* clearly requires—the agency could tier subsequent NEPA documents implementing specific RPA elements, such as cormorant management, to this EIS.

⁷ The Corps' 2014 record of decision on hydrosystem points to an assortment of old NEPA analyses in an apparent effort to assert that collectively these documents satisfy the agency's NEPA obligation to identify, evaluate, and consider alternative FCRPS operation strategies. [cite] However, an EIS more than five years old is presumptively stale. *See* Council on Envtl. Quality, *NEPA's Forty Most Asked Questions* at Question 32, *available at* https://ceq.doe.gov/nepa/regs/40/30-40.HTM#32. The Ninth Circuit has also repeatedly concluded that an agency's NEPA review is inadequate if it relies on outdated information or outdated NEPA documents. *See, e.g., N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1067 (9th Cir. 2011) (concluding that the Surface Transportation Board did not take a "hard look" at environmental impacts when it relied on a ten-year-old aerial survey); *see also W. Watersheds Project v. Abbey*, 719 F.3d 1035, 1052 (9th Cir. 2013) (finding that the agency's NEPA process was deficient, in part because the agency relied on a thirty-year-old EIS without explaining why that data remained accurate).

juvenile salmonid mortality. The Corps had an obligation to complete such an analysis under NEPA, which it could have been satisfied by: (a) including in the Corps' 2015 EIS an analysis of alternatives for improving juvenile salmon survival that did not depend on, or minimized the need to rely on, reducing cormorant predation; or (b) completing an adequate and up-to-date EIS analyzing overall hydrosystem operations in connection with the Corps' decision to adopt FCRPS operations consistent with the RPA in NMFS' 2014 BiOp, and tiering the Corps' cormorant EIS to the Corps' new hydrosystem EIS (assuming the Corps selected a FCRPS operation alternative that called for reductions in cormorant predation). The Corps' failure to consider a reasonable range of alternatives, either in the cormorant EIS or in an EIS performed in conjunction with the agency's overall system operation decision, is arbitrary, capricious, an abuse of discretion, and not in accordance with NEPA, in violation of 5 U.S.C. §706(2)(A).

3. The Agencies' Decisions Violate the Migratory Bird Treaty Act.

The MBTA makes it unlawful for any person to kill any migratory bird; courts have applied this prohibition to federal agencies. 16 U.S.C. § 703(a); *Humane Soc'y of the U.S. v. Glickman*, 217 F.3d 882, 886 (D.C. Cir. 2000). Despite this general prohibition, the Secretary of the Interior, acting through FWS, may permit the killing of migratory birds under some circumstances. Of relevance in this case, FWS may issue a permit "for depredation control purposes" upon receiving an application that specifies, among other things, the "nature of the crops or other interests being injured," and "the extent of such injury." 50 C.F.R. § 21.41(a); 21.41(b)(2) and (3). However, such a permit may not issue if "[t]he authorization requested potentially threatens a wildlife or plant population ..." 50 C.F.R. § 13.21(b)(4).

On April 13, 2015 FWS issued a depredation permit pursuant to 50 C.F.R. § 21.41(a) authorizing the Corps to kill thousands of cormorants and destroy thousands more cormorant MEMORANDUM IN SUPPORT OF PLAINTIFFS MOTION FOR PRELIMINARY INJUNCTION

nests and eggs on and around East Sand Island in the Columbia River estuary. Specifically, the permit allows the Corps and its contractor to kill 3,489 adult cormorants by shooting them on East Sand Island (or their 25 km foraging range around the island), and destroy 5,879 nests by oiling eggs or destroying the nests themselves on the island. *See* Rohlf Dec. Ex. E at 12–13. The permit also specifically authorizes killing 105 Brandt's cormorants and 10 pelagic cormorants by shooting "due to misidentification." *Id.* at 15. Because one bird of a nesting cormorant pair cannot defend its nest or raise young alone, the Corps also recognized that shooting individual cormorants that potentially have nests will result up to an equivalent number of nests being lost. FEIS at 2-39. The Corps' cormorant EIS therefore concludes that up to 3,489 additional nests will be destroyed (when eggs are unable to hatch or newly hatched chicks starve to death) after a parent bird is shot. *Id.* The Corps included these nest destructions and deaths in its application for a depredation take permit under the MBTA, but FWS' actual permit does not authorize these takings.

The Corps' cormorant EIS predicts that implementing the preferred alternative will cause the population of cormorants in the western United States—which is already less than 10% of its historic abundance—to fall below a level that the Corps and FWS define as "sustainable" after implementing Phase I of the Management Plan. FEIS at 4-31. These agencies define a sustainable population as "a population that is able to maintain a long-term trend with numbers above a level that would not result in a major decline or cause a species to be threatened or endangered." FEIS at xiv. The Corps predicts the western cormorant population to be approximately 38,365 breeding individuals at the conclusion of the fourth year of killing birds and destroying nests on East Sand Island, nearly 3,000 birds below the figure of 41,660 breeding

individuals considered to constitute a sustainable population. However, the Corps predicts that the population would then begin a gradual increase to about 44,000 birds. *See* FEIS at 1-38.

In its decision to grant the Corps a depredation permit to kill cormorants and destroy nests, FWS adopted the Corps' analysis of likely impacts on the western cormorant population. Rohlf Dec. Ex. E at 21. FWS cited additional recent survey data that may suggest that the western cormorant population is greater than estimated in the cormorant EIS, though it also noted that this higher figure may stem from different survey methods. *Id.* at 22.

FWS' decision to issue a depredation permit to the Corps under the agency's cormorant management plan is inconsistent with regulations implementing the MBTA, which specifically prohibit the issuance of an authorization permit that "potentially threatens a wildlife or plant population." 50 C.F.R. § 13.21(b)(4). According to the Corps' own analysis, the agency's management plan seeks to drive the western cormorant population below the level identified by the Corps and FWS as "sustainable." FEIS at 1-38. Under the agencies' definition of this term, a population below its sustainable level is at risk of a "major decline" or even listing as threatened or endangered. Id. at 1-37. Though MBTA regulations do not define what it means to "potentially threaten" a wildlife population, it would be unreasonable for the agencies to find that suffering a major decline or falling to the point of listing as threatened or endangered under the ESA does not fall within this definition. Additionally, the agencies' speculation that the cormorant population would "rebound" after it drops below the defined sustainability level has little support. Cormorant populations around the West are experiencing declines due to drought, development, climate change impacts, and human harassment, so rosy projections that cormorant population will increase somewhere other than East Sand Island have little basis in fact. See Rohlf Dec. Ex. J.

Additionally, the Corps' shooting of birds will result in unauthorized take of migratory birds, thus violating the MBTA. Despite the Corps' request to FWS for a depredation permit covering the eggs that will become unviable and young in nests that will die when a parent bird is shot, FWS did not authorize this take. See Rohlf Dec. Ex. K at 2; Rohlf Dec. Ex. E at 12. The Corps' cormorant EIS leaves no room for doubt that shooting an individual bird will also result in the loss of that bird's eggs or death of that bird's young. Without explanation, FWS did not include in its depredation permit authorization of these deaths and this nest destruction. Therefore, shooting individual birds will result in associated take without a permit, which is illegal under the MBTA and thus not in accordance with law in violation of 5 U.S.C. § 706(2)(A).

4. The Corps Violated WRDA.

The Corps' plan to kill cormorants in the Columbia River estuary does not meet the requirements of the Water Resources Development Act of 1996 ("WRDA"). In the EIS, the Corps recognizes that the agency derives authority to manage avian predation on dredged material islands in the Columbia River solely from WRDA. FEIS at 1-25. The relevant portion of this law provides as follows:

In conjunction with the Secretary of Commerce and the Secretary of the Interior, and consistent with a management plan to be developed by the United States Fish and Wildlife Service, the Secretary [of the Army] shall carry out methods to reduce nesting populations of avian predators on dredge spoil island in the Columbia River under the jurisdiction of the Secretary.

16 U.S.C. § 3301 note (emphasis added). However, the Corps rather than FWS developed the management plan for cormorants on East Sand Island.

The Ninth Circuit has held that "[u]nder canons of statutory interpretation, [the Court] must interpret statutes as a whole, giving effect to each word " Boise Cascade Corp. v. U.S. MEMORANDUM IN SUPPORT OF PLAINTIFFS MOTION FOR PRELIMINARY INJUNCTION

E.P.A., 942 F.2d 1427, 1432 (9th Cir. 1991). Here, the plain wording of WRDA authorizes the Corps to manage cormorants only in a manner consistent with a management plan developed by FWS; nothing in the law gives the Corps power to develop and implement its own management plan. This formulation makes sense given that FWS is the nation's primary expert in fish and wildlife management and also the agency that implements legal protections for birds, including the MBTA.

The Corps may well have been attempting to streamline efforts to manage cormorants by combining the NEPA process with formulation of a cormorant management plan. However, the Ninth Circuit has emphasized that "compliance with one environmental statute does not assure compliance with another." Alder v. Lewis, 675 F.2d 1085, 1096 (9th Cir. 1982). Courts apply this logical concept when statutes "mandate[] separate and distinct procedures" Preservation Coal, Inc. v. Pierce, 667 F.2d 851, 858–59 (9th Cir. 1982) (holding that compliance with the National Historic Preservation Act does not guarantee NEPA compliance).

Despite its preparation of an EIS, the Corps simply has no legal authority to manage cormorants on East Sand Island except pursuant to a management plan developed by FWS. Since such a plan does not exist, the Corps' decision to carry our cormorant management activities is outside the agency's power.

B. MASS KILLINGS OF CORMORANTS WILL CAUSE IRREPARABLE HARM

Plaintiffs are a coalition of environmental and humane organizations with members who have recreational, scientific, economic and aesthetic interests in cormorants. As explained below and in the accompanying declarations, without injunctive relief from the Court, the mass killing of cormorants will irreparably harm cormorants and Plaintiffs' interests in these animals.

1. Absent An Injunction, Cormorants – A Public Natural Resource – Will Be Irreparably Harmed

Federal defendants are poised to begin killing more than 3,489 individual cormorants — which will consign many newly hatched chicks to starvation — as well as destroying over 9,000 nests (the largest numbers of birds and nests in the four years of planned actions). This represents a significant portion of the birds in not only the colony on East Sand Island, but are the cormorant population across the western U.S.

Absent a preliminary injunction, there will of course be nothing the Court can do to replace these birds if it eventually rules in favor of Portland Audubon on the merits. Environmental injury is thus a classic example of irreparable harm that favors an injunction. As the Supreme Court has explained, "[e]nvironmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, *i.e.*, irreparable." *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 545 (1987). Thus, as explained more fully below, an injunction is necessary here to preserve public natural resources.

As explained in Section __ above, shooting cormorants and destroying nests in 2015 represents the first step – and the most significant in terms of individual birds shot and total nests destroyed – toward decreasing the entire population of cormorants in the western U.S. to a level that both the Corps and FWS recognize as below their definition of a "sustainable" population. By definition, populations below the level of sustainability are at risk of "major decline" or even listing under the ESA. Cormorants in the West have already dropped to less than 10% of their historic levels, so the planned level of killing and nest destruction in 2015 – in a colony that comprises 40% of the entire cormorant population in the West – may lead to population-level harm. See Wire Dec. at ¶ 9 ("[e]limination of the number of birds specified in the Corps'

management plan runs a significant risk of having detrimental impacts on the entire western population.").

Moreover, the massive scale of killing individual birds and destroying nests planned for this season poses significant risks to the entire East Sand Island colony. Killing will occur during day or at night, both from existing structures on the island and from boats within twenty-five kilometers of East Sand Island. FEIS at 30-31. The agency plans at least 6-8 rounds of cormorant shooting events per year but acknowledges there may be more based on the efficacy of boatbased shooting. Id. at 30. An additional 4-6 (or more, if needed) entries into the colony for egg oiling would also occur. Id. at 39-40. Conservation biologist Linda Wires, one of the country's foremost experts on cormorants who visited the East Sand Island colony last summer, projects that "the cumulative effect of the human disturbance proposed to take place on the colony is of real concern. It is my view that this disturbance on the colony raises significant risk that the entire colony could be abandoned or that reproduction levels could drop to zero." Wire Dec. at ¶ 10. Though the Corps' plan calls for monitoring during killing and egg oiling operations and adjustments in intrusions into the colony if needed to prevent such harm (see FEIS at 33), Ms. Wires believes that "any potential adjustment of this management could prove to be too late as the nature of the colony abandonment could be immediate and thus unable to be mitigated." *Id*. These concerns about colony abandonment are underlined by a comment on the cormorant EIS submitted by Daniel Roby, the Principal Investigator for research, monitoring, and evaluation related to avian predation on juvenile salmonids in the Columbia River estuary and undoubtedly the researcher whose work is cited more than any other throughout the entire EIS. Mr. Roby noted that the "DEIS ignores the susceptibility of cormorants to human or other disturbance, particularly during the early stages of colony formation. Human or other disturbance is the most 27 MEMORANDUM IN SUPPORT OF PLAINTIFFS MOTION FOR PRELIMINARY INJUNCTION

often cited cause of cormorant colony failure and abandonment in the scientific literature." FEIS Appendix J (letter of D, Roby). Since the East Sand Island colony accounts for 40% of the birds' entire population in the western U.S., collapse or reproductive failure of this colony could be disastrous for the population as a whole throughout the West.

2. Killing Cormorants Will Irreparably Injure Plaintiffs' Interests

Courts have held that irreparable harm occurs when the challenged action reduces opportunities to experience animals in the wild. See, e.g., Fund for Animals v. Norton, 281 F. Supp. 2d 209, 222 (D.D.C. 2003) (preliminarily enjoining the killing of swans by the State of Maryland and finding irreparable harm based in part of the plaintiffs' reduced ability to view swans in their natural environment); Fund for Animals v. Clark, 27 F. Supp. 2d 8, 14 (D.D.C. 1998) (finding irreparable injury to plaintiffs who would suffer aesthetic and emotional harm seeing the federal agency's planned bison hunt); Humane Soc'y of the U.S. v. Hodel, 840 F.2d 45, 52 (D.C. Cir. 1988) (explaining that harm from "depleting the supply of animals" is a "classic" aesthetic interest); see also Alliance for the Wild Rockies v. Cottrell 632 F.3d 1127, 1135 (9th Cir. 2011) (holding that a project which would impact six percent of the forest acreage at issue was a likely irreparable harm to the plaintiffs who "view, experience, and utilize" the areas in an undisturbed state.

The executive director of Plaintiff Wildlife Center of the North Coast (WCNC) near Astoria, Sharnelle Fee, has devoted the last twenty-five years of her life and career to the health, welfare, and conservation of pelagic wildlife in the area surrounding the Columbia River estuary, including cormorants. Declaration of Sharnelle Fee (hereinafter "Fee Dec.") ¶¶ 1-8. Fee will irreparably suffer aesthetic and emotional harm from seeing wounded cormorants as a result of the agency actions, witnessing the adverse impacts the culling methods may have on a variety of 28 MEMORANDUM IN SUPPORT OF PLAINTIFFS MOTION FOR PRELIMINARY INJUNCTION

wildlife on East Sand Island, and watching as the agency kills more birds in a single year than she has rescued and rehabilitated in the last five years. Fee Dec. ¶ 15.

In addition to the emotional and aesthetic harm Ms. Fee would suffer as a result of the killings, her organization will likely suffer due to a drop off in volunteer support and difficulties in attracting new volunteers to the organization. Fee Dec. ¶¶ 11-12. In short, it will likely be more difficult to retain and attract volunteers to help rescue and treat pelagic wildlife when the federal government is slaughtering thousands of pelagic birds nearby. *Id.* This threatens the future of the entire organization. Id. Given the difficulties in starting and maintaining a small non-profit organization, this harm to WCNC would be irreparable. In fact, though she otherwise plans to remain WCNC's Director, Ms. Fee has "serious doubts about my ability to continue serving as the Executive Director of WCNC and continue to work long hours every week devoting my time and energy to rescuing and rehabilitating wildlife when faced with the reality that the government is willing to kill thousands of these birds that I have devoted my life to saving." Id. at ¶ 15. Ms. Fee describes the distress that leaving WCNC would cause her, which would obviously be irreparable: "It would cause me great pain to abandon my efforts at WCNC, an organization that I have devoted my life and financial resources to developing and running." Id.

Many members of Plaintiff organizations enjoy observing wild cormorants in the Columbia River estuary, precisely where defendants plan to kill cormorants this spring and summer. Declaration of Noah Greenwald ¶¶ 11-14 (hereinafter "Greenwald Dec."); Declaration of Nancy A. Holmes (hereinafter "Holmes Dec.") ¶¶ 6-9; Declaration of Dr. Virginia Huang (hereinafter "Huang Dec.") ¶¶ 4-6. Plaintiffs have members that live or own property within or near Columbia River estuary and have regular opportunities to recreate near the River and see

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cormorants or hear their calls. See Holmes Dec. ¶ 6; Fee Dec. ¶¶ 1, 13. Other members travel to the Columbia River Basin to seek out opportunities to experience cormorants. Greenwald Dec. ¶ 12. The agencies' decision to kill cormorants threatens Plaintiffs' members' interests in observing cormorants because they will have fewer opportunities to observe cormorants. See, e.g., Holmes Dec. ¶ 15 ("These interests will be irreparably harmed by the agencies' decision to kill thousands of cormorants in areas near I live and where I regularly visit. Because of the killings, there will be less cormorants for me to view and enjoy."); Fee Dec. ¶ 13 ("I have enjoyed watching double-crested cormorants and other various species of birds on ESI. The Corps' cormorant killing program will hinder my ability to observe double-crested cormorants and other species of birds on ESI"). The population declines is also an emotional injury for Plaintiffs' members, who have an interest in biodiversity and preservation of native wildlife. See, e.g., Greenwald Dec. ¶ 9 ("I feel saddened whenever human actions cause the decline or loss of native wildlife because I believe that humans have a responsibility to preserve biodiversity.").

Additionally, an affected staff member and member of Portland Audubon leads educational trips to the estuary specifically to see and learn about birds, including the three affected species of cormorants. Declaration of Daniel van den Broek ¶¶ 4-5 (hereinafter "van den Broek Dec."). The planned killing program may force Audubon to halt its trips to the estuary, and would create an "emotional and/or physical deterrent for future trips in this area." Id. at $\P 7$. This would irreparably harm Audubon by impairing its conservation and education mission.

To be sure, Plaintiffs are emotionally and aesthetically harmed by the possibility that they may actually witness dead cormorants or cormorants suffering from injuries, including cormorants with broken wings. See, e.g., Greenwald Dec. ¶ 15 ("I fear that when I go outdoors near the Columbia River to enjoy the peacefulness of the River and look for birds and other

wildlife this spring and in future years I could come across federal agents killing cormorants. I might also see dead or injured birds that have been shot floating in the river or washed up on shore. This would greatly disturb me."); Holmes Dec. ¶ 13 ("There is a great deal of peace derived in walking along the river scouting the waters and skies for wildlife. Moreover, I think we should be good caretakers of God's creations. I believe that the killing of these cormorants is unethical and it bothers me greatly to know that my tax dollars are being used to support the killings."). Such aesthetic harms are recognized as sufficient to support an injunction. See Fund for Animals v. Clark, 27 F. Supp. 2d 8, 14 (D.C.C. 1998) ("Accordingly, it is not unreasonable for these individuals to claim that seeing or even contemplating the type of treatment of the bison inherent in an organized hunt would cause them to suffer an aesthetic injury that is not compensable in money damages."). The fear of coming across these injured or dying birds harms Plaintiffs' members' recreational interests too. Greenwald Dec. ¶ 17 ("Just knowing that these killings are planned to take place and that I could be exposed to those gruesome actions or injured birds diminishes my enjoyment of recreating in the Columbia River basin.").

An injunction is necessary to prevent this irreparable harm and preserve the effectiveness of any declaratory judgment that the Court would subsequently enter. For all these reasons, Plaintiffs have established that they are likely to experience irreparable harm absent an injunction. Courts have held that aesthetic and emotional injury to plaintiff is sufficient to establish harm. See Fund for Animals v. Clark, 27 F. Supp. 2d 8, at 14 (D.D.C. 1998) (finding irreparable injury to plaintiffs who would suffer aesthetic and emotional harm seeing a the federal agency's planned bison hunt); see also Fund for Animal v Norton, 281 F.Supp.2d 209 (D.D.C. 2003) (finding that plaintiffs who observe mute swans demonstrated a likelihood of irreparable harm from a proposed culling of the mute swan population); see also Alliance for the 31 MEMORANDUM IN SUPPORT OF PLAINTIFFS MOTION FOR PRELIMINARY INJUNCTION

Wild Rockies v. Cottrell 632 F.3d 1127, 1135 (9th Cir. 2011) (holding that a project which would impact six percent of the forest acreage at issue was a likely irreparable harm to the plaintiffs who "view, experience, and utilize" the areas in an undisturbed state).

C. THE BALANCE OF EQUITIES AND THE PUBLIC INTEREST FAVOR AN A PRELIMINARY INJUNCTION

If they demonstrate they are likely to succeed on the merits of their claims, plaintiffs may secure a preliminary injunction by showing that "the balance of equities tips in [their] favor." Winter v. National Resources Defense Council, 555 U.S. 7, 20 (2008). Alternatively, in the Ninth Circuit plaintiffs may secure a preliminary injunction by demonstrating "serious questions going to the merits," and that the balance of equities "tips sharply" in their favor. Cottrell, 632 F.3d at 1134-1135. Moreover, when the federal government is a party to the suit and a party seeks a preliminary injunction, the balance of the equities factor and the public interest factor merge. Drakes Bay Oyster Co. v. Jewell, 747 F.3d 1073, 1092 (9th Cir. 2013) (citing Nken v. Holder, 556 U.S. 418, 435 (2009)). This merging of factors is logical when the government is involved in decision-making that will affect the public, because "there is a strong public interest in meticulous compliance with the law by public officials." Fund for Animals v. Epsy, 814 F. Supp. 142, 152 (D.D.C. 1993) (compliance with NEPA is a public interest expressed by Congress).

In this case, Portland Audubon meets both the *Winter* and sliding scale tests. Plaintiffs believe that they have demonstrated a likelihood of prevailing on the merits of their legal claims, thus triggering a need to show only that the balance of equities tips in their favor. However, for the sake of brevity Plaintiffs will explain how the circumstances of this case meet the more exacting standard.

Federal defendants and intervener will undoubtedly claim that the balance of equities tips in favor of immediately proceeding with efforts to reduce the East Sand Island cormorant colony in order to save threatened and endangered salmon and steelhead. However, even ascribing only the very best motives to federal defendants' efforts to reduce the number of cormorants in the Columbia River estuary, Portland Audubon has demonstrated that both the Corps and FWS did not figure into their analyses information affecting the extent to which (if any) decreasing cormorant numbers on East Sand Island is likely to actually improve survival of juvenile salmon and steelhead. For example, as discussed above the Corps admitted that none of the analyses in its cormorant EIS consider compensatory mortality, even though the agency has evidence that at least some portion of juvenile salmon and steelhead that will not be eaten by cormorants if these birds are killed will simply be eaten by another predator or die of other causes before returning to spawn as an adult.

Of even more concern, the Corps and FWS did not consider as part of their decisions to kill cormorants whether such action is in fact likely to increase the productivity of listed adult salmon and steelhead by to the degree needed to fill the "survival gaps" identified by NMFS in its 2014 BiOp RPA. Further, through their counsel these agencies take the position that such an inquiry is beyond the scope of the record in this case; this means that federal defendants have refused – and will continue to refuse – to provide any information or analyses to Portland Audubon or to this Court relevant to whether killing thousands of birds will actually lead to more listed salmon and steelhead returning to spawn. However, as indicated by the jeopardy metrics of NMFS' BiOp, including the RPA's "survival gaps" due to cormorants, higher runs of listed adult

⁸ At the same time, it is worth noting that tens of thousands of people who submitted comments on the Corps' EIS felt that federal officials are ignoring a need to modify dam operations to protect fish in favor of killing cormorants. *See* FEIS Appendix J at 3.

salmon are of course the goal of the RPA. Therefore, any effort by the Corps and interveners to hold up improved salmon survival as part of the balance of the equities in ruling on injunctive relief asks this Court to perform a balancing test without having access to information as to whether such survival improvements are real or illusory.

The balance this Court must consider therefore looks like this: On one hand, federal defendants plan to kill thousands of birds – some by cruel means such as starvation – and destroy thousands of nests in the colony that accounts for 40% of cormorants in the entire western U.S. This action could also put the entire colony at risk of collapse and complete reproductive failure. On the other hand, granting a preliminary injunction would merely delay, no more than one season, the first year of a four-year action whose benefits to survival of juvenile salmon are unclear, and whose likely success in increasing returns of listed adults and closing the "survival gaps" identified by NMFS are deliberately undisclosed.

All of the plaintiffs in this action spend countless hours every year working to protect wildlife. Further, Portland Audubon currently has another active case in federal court that aims to protect vast areas of habitat for the very salmon and steelhead at issue in this case, and the Center for Biological Diversity is one of the country's leading advocates for endangered species conservation. But all of these plaintiffs strongly believe that the balance of equities in this case tips sharply in favor of maintaining the status quo until this Court can rule on the merits of their claims.

V. CONCLUSION

For all the reasons explained above, Plaintiffs respectfully request that the Court preliminarily enjoin any killing of birds pursuant to the Corps' 2015 "Double-crested Cormorant Management Plan" and FEIS and as authorized by FWS' April depredation permit.

DATED: April 29, 2015

Respectfully Submitted,

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